

less than 11 miles apart and are connected by an unbroken summit ridge. Mt. Eddy has been placed in the "Scott Mountains" by some authors, and names for mountains in the area remain unclear even on current maps (Whipple 1981). Collections of other taxa dating from the era of *Lemmon 10* which cite "Scott Mountain" have also led to confusion (W. Ferlatte personal communication).

If the Scott Mountain and Dobkins Lake locations were recorded erroneously there would no longer be reason to consider subalpine forest to be habitat for *P. chartaceum*, nor would there be any reason to place the lower elevational limit of *P. chartaceum* in the Klamath Range at 6000 ft (1800 m); a lower elevational limit based on extant populations would be 2600 m—the lower limit of the newly documented (i.e., *Pritchett 101*) populations near Mt. Eddy.

Another interpretation may be made of the data discussed above. Populations may have existed at Scott Mountain and Dobkins Lake, but became extinct before any botanists besides Lemmon and Johnson saw them. The two locations may contain marginal habitat where populations are re-established at very low rates. This hypothesis is, however, for practical purposes, impossible to test.

All known populations of *P. chartaceum* are found in open, alpine fell fields well above treeline. Unless populations are discovered in subalpine forest, the most plausible explanation of the locations referred to in *Lemmon 10* and *Johnson s.n.* (1934) is, for reasons discussed above, that they were erroneously described. Descriptions of habitat and occurrence of *P. chartaceum* should be revised accordingly.

I thank Bob Patterson for advice and encouragement, Julie Nelson for assistance in the field, Dieter Wilken, Mark Porter, Bill Ferlatte and Barbara Williams for their comments, and Isabelle de Geofroy for verifying collection data. This research was supported in part by grants from the University of California White Mountain Research Station, the California Native Plant Society, and the Hardman Foundation for Evolutionary and Conservation Research.

(Received 1 Nov 1993; accepted 4 May 1994)

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*GALENIA PUBESCENS* (AIZOACEAE), NEW TO THE NORTH AMERICAN FLORA.—Timothy S. Ross, Rancho Santa Ana Botanic Garden, 1500 N. College Avenue, Claremont, CA 91711.

In June of 1992, while conducting a botanical survey on a site to be developed in Los Angeles County, John Ekhoﬀ, working as a private consultant, encountered an interesting, locally weedy plant which formed low, broadly spreading mounds. The species was common at a portion of the site, so flowering and fruiting material was collected and taken to a couple of individuals who were unable to identify it. Ultimately Mr. Ekhoﬀ brought material to RSA where the prospect of hunting down the plant's identity presented an enjoyable challenge. The author utilized available keys to the angiosperm families and genera while Dr. Robert F. Thorne thought it similar if not identical to a taxon that occurred in Australia. Both eventually arrived at the genus *Galenia*. Fortunately, a monograph of the genus was available (R. S. Adamson, *The South African Species of Aizoaceae. III. Galenia L.*, *Journal of South African Botany* 22:87–127, 1956) and the identity of the collection could be ascertained as *Galenia pubescens* (Ecklon & Zeyher) Druce var. *pubescens*. Given the unusual nature of the find, Mr. Ekhoﬀ returned several days later with a large bag of additional material to be pressed and distributed more widely.

The following two collections from the original discovery site are being distributed (herbarium acronyms follow Holmgren et al., *Index Herbariorum*, Part I, 8th ed., 1990).

CALIFORNIA. Los Angeles Co.: Signal Hill, disturbed, undeveloped property along Hill Street in the two-block area between Stanley and Ohio Avenues, locally

common herbaceous to suffrutescent perennial, forming low mounds or mats 10–30 dm in diameter, elevation ca. 250 ft (76 m), Long Beach USGS 7.5' Quadrangle T4S R12W Section 29, 5 June 1992, *J. Ekhoff, s.n.* (RSA [2 sheets], UC); same location, 12 June 1992, *J. Ekhoff, s.n.* (RSA, AD, ARIZ, CAS, CDA, GH, K, MO, NY, OSU, RM, TEX, UCR, UCSB, US).

The genus *Galenia* comprises ca. 27 species with a natural distribution restricted to southern Africa. There it is particularly characteristic of the west and south-west, especially along the margins of the Karoo, although some taxa occur along the southern coastal belt. All the taxa are lowland plants and are apparently absent from the main summer-rainfall areas. Two of the taxa, *G. secunda* (L.f.) Sonder in Harvey and *G. pubescens* var. *pubescens*, are now naturalized weeds in lowland areas of southern Australia (A. Prescott in A. S. George [ed.], *Flora of Australia*, Vol. 4, pp. 50, 52, 1984). *Galenia secunda*, the first and only other species of the genus recorded in the North American flora, was apparently reported by Clewell from the Florida panhandle (John W. Thieret personal communication). It is interesting to note that, of the 27 species in the genus, the two now collected in North America are the same two taxa that occur as weeds in southern Australia.

There are two known herbarium specimens documenting that *G. pubescens* var. *pubescens* was cultivated previously at the U.S. Fire Lab at the University of California, Riverside. These sheets are deposited at UCR (U.S. Fire Lab, UCR; nursery-grown; seeds from Australia; *Eamor C. Nord, s.n.*, 29 July 1970) and CDA (same location; *E. C. Nord, s.n.*, 29 January 1971). According to Andrew C. Sanders, Curator of the UCR herbarium (personal communication), Mr. Nord was interested in fire-resistant plants, particularly those that grew as groundcovers, and consequently cultivated a diversity of unusual taxa in the course of his studies. Despite the fact that this taxon has been cultivated in Southern California, however, there appears to be no evidence suggesting a link between the material grown at Riverside in the 1970's and the plants encountered as weeds at Signal Hill, which may have arrived at the site via independent means.

This taxon is adapted to low-elevation areas with a winter-rainfall regime and long, dry summers, and can be quite tenacious once established. Adamson (1956) indicates that in southern Africa this species has been utilized as a fodder plant during periods of drought. Its resilience is amply demonstrated at Signal Hill where, according to Mr. Ekhoff, plants are mowed on a fairly regular basis but continue to flourish, and a portion of the site that has been plowed is still infested (personal communication, Feb. 1994). A single, well-established plant may also produce hundreds (if not thousands) of seeds in a single season. Needless to say, an alien species with these characteristics has the potential to become a serious weed in lowland regions of the Pacific U.S. Although the currently known site is land-locked in suburbia, it is unclear whether the proposed development at the Signal Hill locale will result in the extirpation of this potentially pernicious weed. Due to the species' adaptability and tenacious demeanor once established, botanists and agricultural agents should watch carefully for it when working in the field in order to prevent its establishment elsewhere in the region.

Since the taxon has not previously been recorded in North American floras, the following descriptive information is provided, adapted from Adamson (1956) and Prescott (1984):

*Galenia* L. (*Species Plantarum* 1:359, 1753. *Genera Plantarum* 5th ed., 169, 1754. Type species, *G. africana* L. Named for Claudius Galenius, Roman physician and writer on medicine ca. 130–200 A.D.). The genus is characterized by exstipulate leaves, small flowers, a superior ovary with a single pendulous ovule in each carpel, and stamens twice as many as the perianth segments and arranged in pairs alternating with the perianth lobes. Two subgenera are recognized: Subgen. *Galenia* (6 spp.), erect or suberect shrublets with opposite, linear or linear-oblong (sub-) glabrous leaves, 4-merous perianths, 2 styles, and fruits not or tardily dehiscent; and Subgen. *Kolleria* (Presl) Fenzl emend. Adamson (21 spp.), to which the two North American adventives

belong. This latter subgenus consists of prostrate or diffuse shrublets; leaves usually secund, opposite or alternate, most commonly obovate or spatulate and commonly gray or whitish; flowers in secund or cymose inflorescences; perianth segments 4 or 5, usually alike; styles 2–5; and fruit dehiscent.

*Galenia pubescens* (Ecklon & Zeyher) Druce var. *pubescens* (Botanical Society and Exchange Club of the British Isles 1916:624, 1917). Suffrutescent perennial, forming green or grayish patches 1 m or more across. Stems procumbent, 2.5–15 dm long, much branched. Young parts with closely appressed rather coarse hairs, the older glabrescent. Leaves alternate, papillose; those on the main shoots broadly obovate-spatulate, 5–22 mm long, 2–20 mm wide, obtuse or subobtuse, narrowed at the base, often falling at about flowering time; those on lateral branches smaller, more acute, often concave above. Flowers on alternate secund lateral branches 2–8 cm long, either distant or crowded, and often themselves branched. The flowers solitary or with a pair of branchlets from the base 1–3 mm long, each bearing 1–3 flowers. Bracts similar to the leaves but smaller, less narrowed at their bases. Perianth segments generally 5, 2–3 mm long by ca. 1 mm broad, pubescent with closely appressed hairs outside, white to pinkish inside; anthers usually pink (pale salmon-pink in the Signal Hill material). Capsule conspicuous, 2.5–3 mm wide, 1 mm long, persistent with leaf bases. Seeds ca. 1.2–1.4 mm long, subreniform-ovate in profile, glossy black (reddish-brown when immature), striate dorsally, the striations broken and somewhat tuberculate laterally.

(Received 15 Apr 1994; accepted 10 May 1994)

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## NOTEWORTHY COLLECTIONS

### ARIZONA

*LEPIDIUM LATIFOLIUM* L. (BRASSICACEAE). — Coconino Co., Grand Canyon National Park, Colorado River Mile (CRM) 37 [below Lees Ferry], Tatahatso Wash pool at base of wash and outflow, 30 July 1978, *Gloria Hardwich Griffith s.n.* (MNA).

*Previous knowledge.* An eastern Mediterranean weed that has been spreading in the U.S. from east to west, it occurs in Utah and California. The closest published population in Utah is in Washington Co. (Albee et al., Atlas of the Vascular Plants of Utah, 1988), although it is more common along the Wasatch Front and tributaries into the Green River in northeastern Utah. It should be looked for in the Green and Colorado river drainages in southeastern Utah and additional tributaries of the Colorado in the Grand Canyon.

*Significance.* The MNA specimen represents the first collection from Arizona (misidentified as *L. medium*) and may document the site of introduction. This species is rapidly colonizing moist sandy beaches and channel margin habitats along the length of the Colorado River in Grand Canyon National Park. In the past two years it has been documented from numerous additional sites: CRM 24.5, 34–36, 43, 51.5, 56, 59, 71, 74, and 194 [duplicate verified by I. Al-Shebaz (MO)]. Specimens from these locations are deposited at ASC. The plants are long-lived perennials that reproduce by rhizomes as well as setting hundreds of seeds that become mucilaginous and sticky